ACOUSTICAL ANALYSIS ASSOCIATES, INCORPORATED

AAAI Report 1268
AAAI Project 88018

QUARTERLY NOISE MONITORING AT BURBANK AIRPORT FOURTH QUARTER 2002

Jane M. Beckmann
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FEBRUARY 2003

Prepared for:

BURBANK GLENDALE PASADENA AIRPORT

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Prepared for:

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QUARTERLY NOISE MONITORING AT BURBANK AIRPORT
FOURTH QUARTER 2002

I. INTRODUCTION

In compliance with the California Noise Standards (Reference 1) and the current variance from certain provisions of the Standards (Reference 2), the operator of the Burbank Airport is required to perform noise monitoring in the vicinity of the airport for the purpose of establishing a noise impact boundary. The Noise Standards currently specify a community noise equivalent level (CNEL) of 65 dB for the noise impact boundary[1]. The airport is required to provide, each quarter, an updated annual noise impact contour based on measurement data over the four preceding quarters.

A permanent noise monitoring system became operational in April 1980 and, with brief interruption for system expansion, maintenance, and program changes, has been operational since that time. The original noise monitor sites have remained unchanged (with the exception of Site 8 that was moved about 15 feet because of construction). Two sites were added east of the airport in late 1980. Four sites were added south of the airport in January 1986 in response to the requirement to determine the 65 dB contour. Three more locations were added in February 1997. Two of these, identified as 16 and 17, are south of the airport, and one, 18, is to the west. The site to the west replaces Site 8. These locations were added to permit monitoring closer to the 65 dB contour. The noise monitoring computer at the airport was replaced in August 1995.

This report describes the data acquired by the monitoring system during the fourth quarter of 2002. Noise impact boundaries for 65 dB and 70 dB are shown based on these measurements and measurements obtained during the first, second and third quarter of 2002 reported in References 3, 4 and 5. Figure 1 shows the 70 dB contour and Figure 2 shows the 65 dB contour, based on the measured noise data.

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[1] Prior to January 1, 1986, a CNEL of 70 dB defined the noise impact boundary.

Figure 1. CNEL 70 CONTOUR FOR BURBANK AIRPORT
FOURTH QUARTER 2002

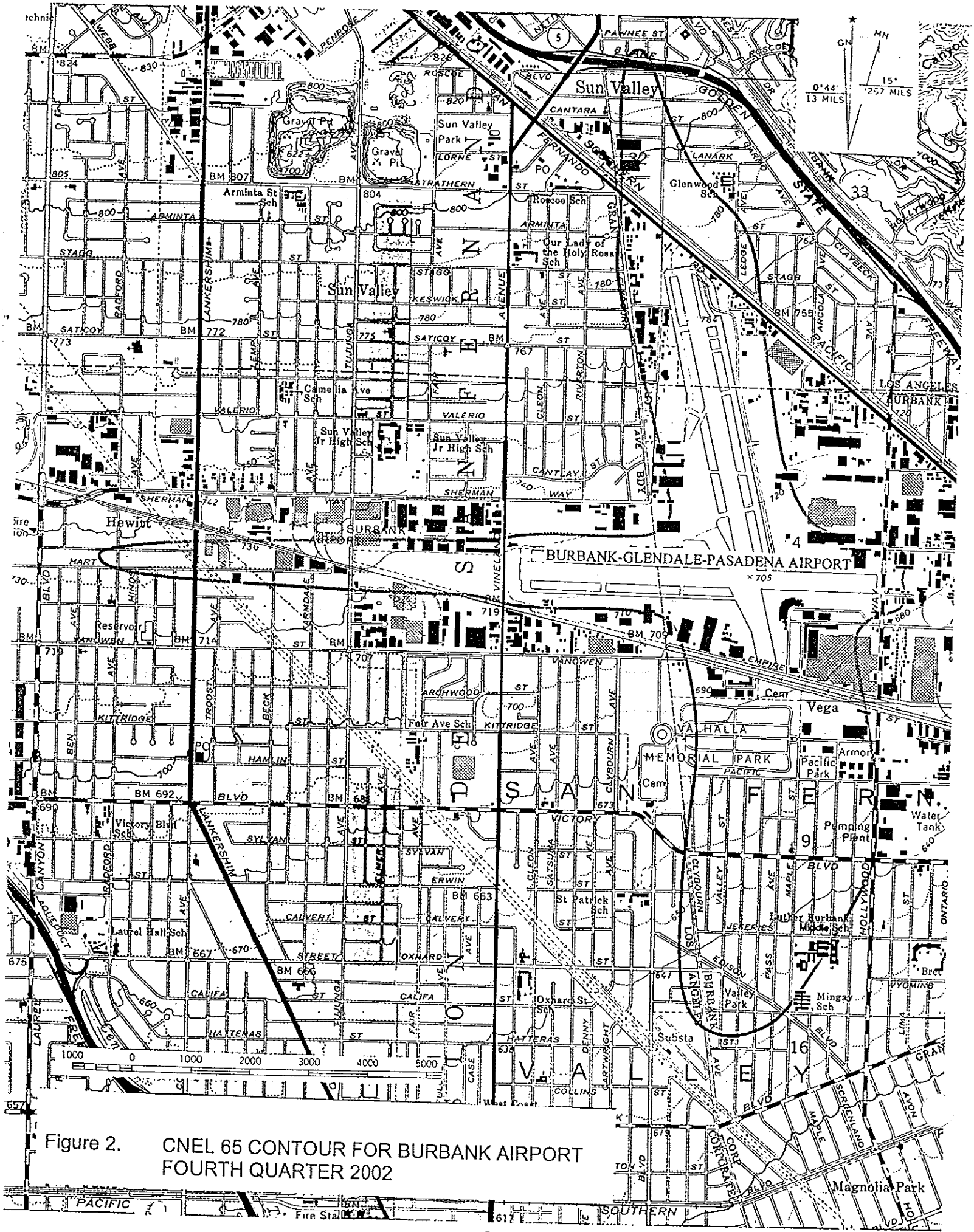

Figure 2. CNEL 65 CONTOUR FOR BURBANK AIRPORT
FOURTH QUARTER 2002

II. NOISE MEASUREMENTS

A. Sites

Aircraft noise levels were monitored at 15 locations prior to February, 1997. Two sites were added in February 1997, and equipment at one site west of the airport was moved to a new location. The noise monitor sites are shown in Figure 3. No data were recorded at Site 8 after Site 18 became active. The site is still shown on this figure.

B. Noise Measurement Equipment

Each of the microphone locations uses an identical set of equipment connected to a central control unit. The noise level at each site is digitized and transmitted by phone line to the central site. The computer at the central site processes the data to produce (among other measures) the CNEL at each site. Appendix A provides a brief description of the system.

C. Noise Data

Electrical power and phone line interruptions occurred several times during the quarter resulting in loss of data. Tables 1, 2, and 3 show each site monitoring RMS "OFF" if the site was operating for less than 94% of the time. The data for these days were excluded from the averages.

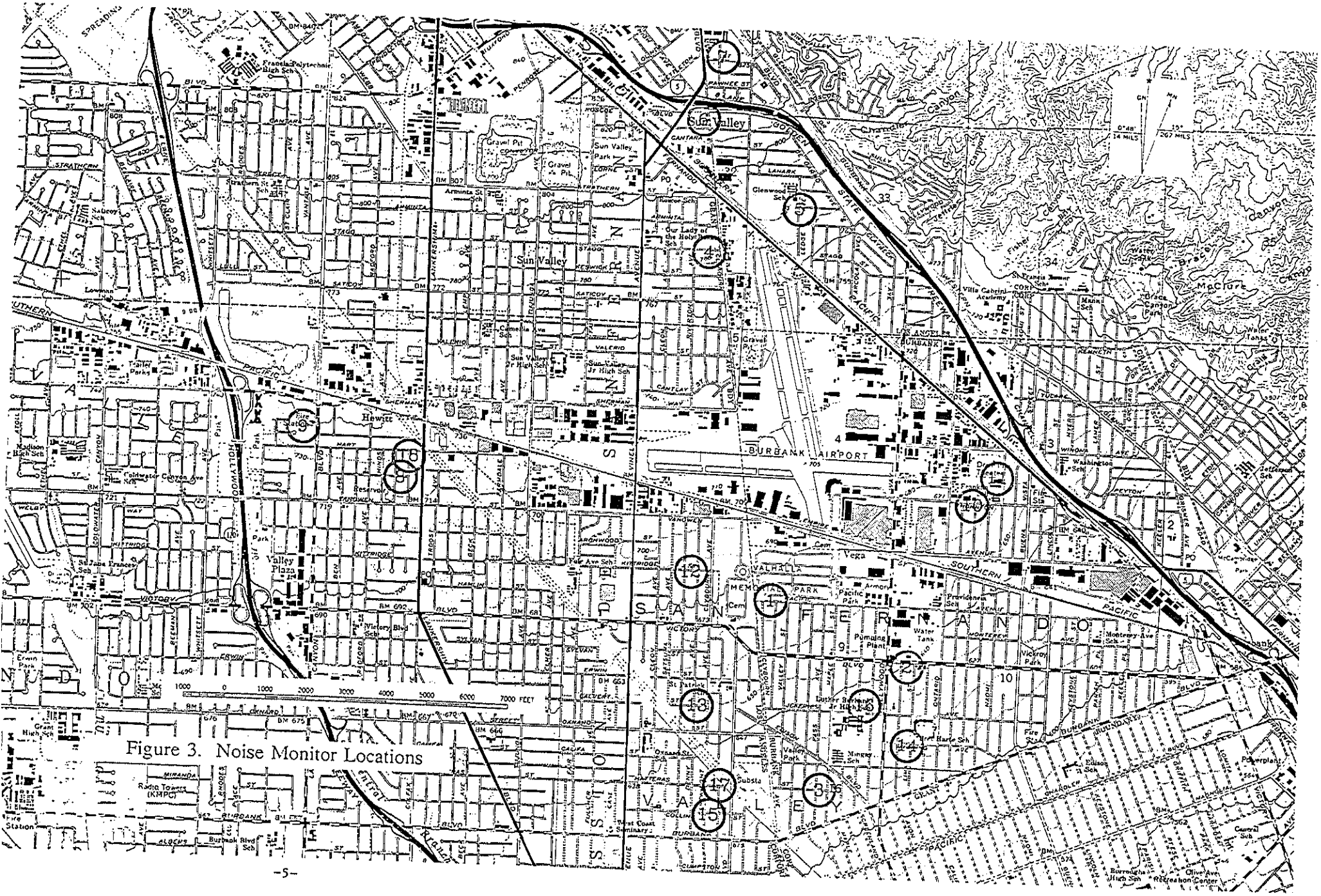

Figure 3. Noise Monitor Locations

D. Operational Data

Detailed departure and arrival logs are provided by the airlines. Operations of other jet aircraft are determined from air traffic strips provided by the FAA at Burbank Tower. In addition, flight schedules and logs of nighttime operations are provided by airport personnel.

III. MEASURED NOISE DATA

Daily CNEL values for the noise monitoring system are listed in Tables 1, 2, and 3. Table 4 lists the average values for each quarter together with the annual average.

IV. SCHEDULED AIRLINE AND COMMUTER OPERATIONS

The scheduled air carrier and commuter operations for the quarter are shown in Table 5.

V. CNEL CONTOUR DEVELOPMENT

The contours shown in Figures 1 and 2 are based upon computer-generated "master" contours which are adjusted to reflect the monitoring data. This fourth quarter 2002 used the master contours produced by Version 6.0C of the Integrated Noise Model (INM), a sophisticated aircraft noise modeling program developed for the Federal Aviation Administration. Inputs to the program consist of aircraft types and performance data, flight paths, numbers of operations, and day/evening/night distribution of flights. The program calculates CNEL values at equally spaced grid points and produces CNEL contour lines at 1 dB intervals. The annual average CNEL values at each site were marked at the appropriate locations on the contour map and the locations of the 65 and 70 dB CNEL contours were determined in the vicinity of each measuring point. These points were then joined following the general shape of the computed contours.

The master contours, used in developing the contours for this quarter are based on operations for the 12-month period from January 1998 through December 1998. This replaced the previous master set of CNEL Contours which were based on operations for the 12-month period from January 1995 through December 1995.

TABLE 1. CNEL VALUES FOR OCTOBER 2002

	RMS NUMBER																	
DATE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
10/01/02	67.5	63.9	64.4	61.8	63.6	57.2	54.3	OFF	64.9	57.6	54.9	58.9	63.9	60.7	64.7	64.0	64.6	65.8
10/02/02	65.6	62.9	64.2	61.3	62.6	63.1	63.8	OFF	62.9	56.7	55.7	55.0	62.4	59.5	63.6	63.7	63.6	64.6
10/03/02	65.8	64.5	66.0	59.6	61.4	63.0	64.1	OFF	63.5	56.6	58.0	56.1	61.0	61.6	64.1	65.5	63.6	64.5
10/04/02	66.3	65.0	67.1	59.4	62.4	62.8	62.5	OFF	63.3	55.6	56.2	56.8	61.7	61.9	64.4	66.4	64.2	64.9
10/05/02	62.9	60.9	62.7	58.7	60.3	59.4	59.5	OFF	58.7	54.1	47.7	53.2	59.1	57.4	61.9	62.5	61.6	61.9
10/06/02	63.8	61.9	64.0	61.7	64.9	58.2	62.4	OFF	61.1	53.0	52.2	54.6	59.8	59.2	63.4	63.6	63.6	63.6
10/07/02	65.1	62.7	64.6	65.3	64.3	63.2	64.8	OFF	61.9	54.4	57.4	55.9	61.2	59.7	63.6	64.2	63.6	62.7
10/08/02	65.6	63.3	65.4	65.0	65.1	61.6	63.5	OFF	63.0	61.2	58.5	56.6	62.4	60.2	64.7	64.6	64.5	64.1
10/09/02	65.6	62.8	64.7	60.7	58.4	60.1	61.7	OFF	63.5	58.2	57.4	55.2	62.5	59.2	63.2	64.0	63.1	64.8
10/10/02	65.7	63.5	64.9	61.3	62.3	59.5	59.3	OFF	65.5	53.7	55.8	54.8	61.6	59.7	64.1	64.5	64.1	66.2
10/11/02	66.0	65.1	66.1	60.6	63.1	60.2	58.1	OFF	64.8	54.3	53.8	55.0	61.7	61.1	65.1	65.5	64.9	66.1
10/12/02	63.9	61.3	62.8	56.8	58.8	53.8	56.7	OFF	61.6	55.9	58.3	52.3	60.2	57.8	62.4	63.5	62.3	62.8
10/13/02	64.9	62.5	64.7	63.2	61.2	53.2	58.1	OFF	64.3	52.9	43.2	53.0	60.8	59.7	63.2	63.9	63.2	65.0
10/14/02	65.1	62.0	64.4	OFF	60.6	52.4	52.7	OFF	64.5	50.3	52.4	53.7	61.2	59.3	63.0	63.7	63.1	65.(
10/15/02	66.4	62.9	63.4	58.5	61.0	56.9	52.5	OFF	64.9	51.9	49.9	55.7	62.1	58.8	63.2	63.5	63.3	66.3
10/16/02	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
10/17/02	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
10/18/02	66.5	65.6	67.6	59.1	63.5	59.0	57.4	OFF	65.4	58.9	57.8	56.5	63.0	62.8	64.7	66.7	64.5	66.4
10/19/02	65.9	63.6	65.8	57.1	62.0	56.9	57.5	OFF	61.3	56.6	57.2	55.9	61.7	60.7	64.7	65.1	64.5	62.7
10/20/02	64.7	62.6	64.5	62.1	60.3	49.7	51.3	OFF	64.7	46.5	48.8	54.5	61.4	59.3	64.4	63.8	64.6	65.4
10/21/02	66.3	63.0	63.8	59.6	64.4	57.5	56.5	OFF	64.9	57.5	52.5	53.6	62.9	59.6	63.6	64.4	63.5	66.1
10/22/02	64.9	63.0	63.6	60.3	62.9	61.4	57.0	OFF	64.8	61.6	55.1	55.1	61.3	60.0	62.9	63.2	62.9	66.2
10/23/02	67.6	63.9	65.6	61.6	64.9	60.0	58.6	OFF	64.1	58.6	57.8	56.8	64.3	60.7	65.2	65.3	65.4	65.0
10/24/02	66.0	64.6	66.4	58.6	61.8	57.2	56.3	OFF	65.0	60.4	60.4	56.4	61.9	61.6	65.0	65.6	65.1	65.6
10/25/02	66.4	65.9	67.9	59.3	62.7	59.8	61.2	OFF	64.3	56.9	58.1	57.7	63.0	62.8	66.5	67.0	66.1	65.5
10/26/02	65.0	62.8	64.5	61.7	62.6	61.4	55.9	OFF	62.1	55.9	49.7	55.1	62.1	59.7	64.1	63.9	63.9	66.9
10/27/02	65.1	64.0	66.6	56.4	59.9	53.2	59.1	OFF	63.8	50.4	47.1	55.2	60.6	61.3	64.3	66.0	63.6	64.8
10/28/02	65.9	63.7	65.2	OFF	62.9	63.7	63.2	OFF	63.3	60.3	56.5	56.6	62.5	61.0	63.9	65.3	63.6	65.1
10/29/02	67.2	63.9	65.2	62.2	64.3	61.3	57.3	OFF	64.1	55.8	50.6	55.9	64.6	60.4	64.8	64.7	64.9	65.4
10/30/02	65.0	61.9	63.0	57.4	56.5	55.0	54.8	OFF	64.7	58.8	55.4	53.3	62.2	59.0	63.2	63.4	63.0	66.4
10/31/02	65.8	64.4	66.5	55.4	61.1	54.7	53.7	OFF	64.5	60.8	54.2	56.3	63.2	61.1	65.6	65.5	65.4	65.4
AVERAGE	65.7	63.6	65.2	60.8	62.5	59.7	59.9	0.0	63.9	57.3	55.7	55.6	62.1	60.4	64.2	64.7	64.0	65.2
NO./DAYS	29	29	29	27	29	29	29	0	29	29	29	29	29	29	29	29	29	29

TABLE 2. CNEL VALUES FOR NOVEMBER 2002

RMS NUMBER

DATE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
11/01/02	67.1	66.0	67.9	66.6	67.4	60.2	60.9	OFF	65.4	59.2	56.4	59.6	63.0	63.3	65.2	67.6	64.8	66.0
11/02/02	64.8	62.5	63.3	59.5	60.8	53.7	53.9	OFF	61.3	55.5	53.3	54.5	60.9	59.0	62.3	63.5	62.2	63.0
11/03/02	64.0	62.0	64.7	66.1	69.0	55.7	58.5	OFF	62.0	48.6	53.9	53.4	57.5	59.2	61.0	64.1	60.8	64.1
11/04/02	66.3	63.9	65.4	66.0	66.4	60.2	58.1	OFF	64.4	54.6	51.7	56.9	63.2	60.1	63.9	65.3	63.7	65.7
11/05/02	66.4	65.0	65.8	58.8	61.4	60.1	60.5	OFF	63.4	67.8	62.4	60.7	63.0	61.0	64.6	65.0	64.4	65.4
11/06/02	66.2	64.7	66.7	70.8	70.6	62.3	62.1	OFF	62.6	61.9	58.7	60.4	61.8	61.4	62.7	65.8	62.9	64.2
11/07/02	68.0	65.4	66.9	63.7	65.6	59.4	59.7	OFF	65.4	59.7	58.6	58.2	64.1	62.6	65.4	67.2	65.2	66.6
11/08/02	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
11/09/02	63.5	60.5	61.1	60.3	54.0	48.9	52.8	OFF	62.0	46.4	36.1	51.4	OFF	56.8	60.8	61.1	60.8	63.2
11/10/02	60.7	54.8	59.8	61.5	62.7	66.2	61.5	OFF	57.5	54.5	49.1	53.7	OFF	56.9	51.3	66.1	OFF	61.9
11/11/02	66.8	64.9	65.3	63.6	64.0	59.7	60.5	OFF	OFF	54.3	54.1	57.4	OFF	67.1	63.4	69.5	63.3	63.5
11/12/02	65.6	64.3	65.6	63.2	64.1	63.6	64.3	OFF	OFF	56.0	58.8	58.7	OFF	61.0	63.5	65.0	63.0	63.6
11/13/02	66.1	64.8	66.5	63.3	65.7	60.1	64.3	OFF	OFF	58.7	56.2	58.8	OFF	62.1	64.0	65.8	63.4	63.9
11/14/02	65.2	63.2	65.3	66.6	65.5	62.9	64.2	OFF	63.4	58.3	58.4	58.4	OFF	60.3	63.7	65.0	63.4	64.6
11/15/02	66.5	64.5	66.9	64.9	64.6	62.0	63.9	OFF	62.5	60.6	57.9	54.7	61.2	61.6	63.4	66.2	63.0	64.2
11/16/02	62.9	60.1	62.3	61.1	61.9	57.7	58.4	OFF	60.2	50.2	56.1	52.4	58.0	56.8	60.8	62.1	60.7	61.1
11/17/02	64.5	62.8	65.4	66.1	68.5	57.8	61.0	OFF	62.5	OFF	OFF	54.1	60.9	59.9	62.2	64.9	62.0	63.6
11/18/02	63.2	61.8	64.1	66.3	69.2	60.3	62.8	OFF	60.5	55.4	55.7	53.0	59.4	58.6	61.8	63.6	61.7	61.7
11/19/02	64.4	62.1	64.8	63.4	64.1	60.5	62.5	OFF	61.6	56.7	58.1	55.2	59.8	59.3	61.8	63.6	61.1	62.8
11/20/02	63.6	62.8	64.9	65.4	63.5	60.3	62.6	OFF	61.6	58.9	56.9	53.1	61.1	59.1	63.3	64.1	63.0	63.0
11/21/02	65.1	63.9	66.0	62.6	64.3	65.0	64.6	OFF	61.9	58.9	62.1	60.0	60.2	61.2	63.1	66.0	62.6	63.6
11/22/02	65.7	64.2	65.5	63.9	65.6	62.0	64.2	OFF	63.5	59.4	60.9	58.9	63.4	61.7	63.7	66.3	63.4	64.7
11/23/02	64.7	62.1	64.4	56.1	57.5	59.0	60.2	OFF	62.3	54.9	51.0	55.8	62.4	58.3	63.7	63.7	63.9	63.9
11/24/02	64.3	62.8	63.2	63.0	61.1	58.2	54.1	OFF	63.4	52.3	46.8	55.1	59.5	58.3	62.1	64.7	61.7	64.4
11/25/02	59.4	54.4	59.3	63.4	63.4	67.1	63.4	OFF	59.3	48.7	56.3	52.9	56.5	53.4	56.9	62.3	56.5	60.0
11/26/02	62.0	57.4	60.9	63.2	62.3	67.9	63.9	OFF	62.6	59.6	54.1	51.8	54.3	55.0	56.8	60.6	56.3	63.5
11/27/02	64.8	62.7	65.6	64.2	60.8	57.6	60.3	OFF	63.2	58.3	55.6	54.9	60.9	60.2	63.4	65.2	63.0	64.7
11/28/02	62.1	61.2	64.2	64.5	66.9	54.5	53.3	OFF	58.5	47.0	59.0	49.9	57.2	58.7	59.2	63.8	58.8	59.7
11/29/02	64.3	62.1	63.0	56.6	57.2	54.3	59.6	OFF	62.5	59.7	55.8	56.8	61.5	OFF	62.4	62.4	62.2	63.5
11/30/02	63.9	63.7	64.5	58.6	62.1	53.9	58.9	OFF	62.5	53.3	52.9	56.7	60.6	60.3	63.8	65.3	63.0	63.7
AVERAGE	64.9	63.1	64.9	64.3	65.1	61.6	61.6	0.0	62.5	58.6	57.1	56.7	61.0	60.4	62.7	65.1	62.6	63.8
NO./DAYS	29	29	29	29	29	29	29	0	26	28	28	29	23	29	29	29	28	29

TABLE 3. CNEL VALUES FOR DECEMBER 2002

	RMS NUMBER																	
DATE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
12/01/02	65.2	63.5	66.2	59.7	62.6	56.9	60.9	OFF	62.4	50.9	53.8	57.1	61.4	60.6	64.7	65.6	64.0	64.5
12/02/02	65.7	64.1	66.7	61.3	65.4	61.8	62.9	OFF	63.1	59.1	58.6	55.6	63.5	61.8	64.1	66.0	63.7	64.6
12/03/02	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
12/04/02	66.5	64.5	65.8	63.1	63.3	61.6	63.4	OFF	63.2	59.3	58.2	58.0	63.8	61.3	64.9	65.7	OFF	64.7
12/05/02	65.2	64.4	65.5	64.2	63.7	61.4	63.0	OFF	62.9	59.2	60.2	58.8	61.2	61.4	63.8	66.2	63.2	64.6
12/06/02	66.0	64.0	65.3	62.1	63.2	60.2	64.1	OFF	64.2	60.6	59.0	57.8	63.2	60.6	65.3	64.6	65.1	65.2
12/07/02	64.9	63.4	62.7	60.8	61.5	59.3	54.6	OFF	61.9	52.7	50.9	55.7	61.2	58.3	62.5	64.7	62.4	63.1
12/08/02	65.1	64.8	67.0	61.7	68.8	59.8	60.3	OFF	64.4	54.9	53.8	62.2	62.1	63.1	63.6	68.5	63.2	68.5
12/09/02	63.1	61.2	63.3	60.9	61.2	61.8	64.2	OFF	58.7	59.0	59.5	55.3	62.1	58.9	63.2	63.6	62.5	64.8
12/10/02	64.6	58.6	OFF	65.0	64.3	65.4	64.6	OFF	OFF	58.0	OFF	57.5	61.3	OFF	64.1	65.8	63.6	64.6
12/11/02	66.3	62.2	OFF	66.5	69.9	69.6	66.0	OFF	63.9	61.8	OFF	59.7	62.4	OFF	62.9	63.3	62.9	64.7
12/12/02	68.3	64.7	64.4	66.2	66.3	61.2	64.1	OFF	62.5	56.8	54.0	59.4	62.0	61.7	64.5	65.5	64.0	64.3
12/13/02	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
12/14/02	65.5	62.3	63.0	62.0	64.3	56.5	60.6	OFF	62.1	53.5	52.2	55.3	63.4	58.2	63.8	62.7	64.0	6
12/15/02	64.1	62.1	62.9	56.1	57.6	49.8	55.2	OFF	63.0	53.7	52.5	52.6	60.5	58.9	62.5	63.0	61.9	64.0
12/16/02	69.2	66.5	66.1	66.8	67.0	62.5	60.4	OFF	64.9	61.4	58.3	58.9	OFF	62.9	65.4	66.5	65.1	66.0
12/17/02	67.4	65.5	66.3	61.0	66.4	63.3	61.6	OFF	62.2	62.7	61.3	56.2	61.2	62.5	63.5	67.5	63.2	64.6
12/18/02	63.1	59.9	61.9	65.3	66.4	69.7	66.5	OFF	61.4	59.2	55.6	56.8	58.1	58.8	59.7	65.8	59.5	63.7
12/19/02	67.1	62.3	63.2	64.1	63.3	57.2	62.8	OFF	65.7	61.2	60.2	59.8	64.4	59.3	64.5	63.2	64.2	67.3
12/20/02	68.5	66.4	68.4	63.3	66.8	59.8	61.7	OFF	65.9	57.5	55.5	59.4	64.9	63.8	66.4	67.8	66.0	67.4
12/21/02	65.2	63.9	65.9	59.6	61.5	53.8	51.8	OFF	63.7	55.5	53.4	56.9	61.6	61.0	63.8	65.8	63.2	65.1
12/22/02	62.4	56.6	60.8	63.0	63.0	66.6	64.6	OFF	61.1	51.3	40.2	56.8	56.6	56.5	52.3	64.1	53.5	63.8
12/23/02	65.6	62.6	65.5	63.1	62.8	65.5	67.8	OFF	62.6	58.9	55.8	58.5	59.8	60.3	62.8	64.5	63.3	64.1
12/24/02	67.5	63.0	65.4	63.4	63.4	59.8	60.1	OFF	61.2	59.4	57.3	58.0	61.5	60.7	63.3	64.9	62.7	63.5
12/25/02	65.6	63.2	65.4	59.0	65.3	54.2	56.4	OFF	60.8	52.1	48.8	59.3	63.3	60.4	64.0	64.7	63.6	62.8
12/26/02	66.6	64.4	66.4	59.6	63.5	58.3	60.6	OFF	64.3	57.4	57.6	58.1	63.3	61.6	65.1	65.6	64.2	65.9
12/27/02	69.0	63.5	65.1	60.0	62.9	62.9	63.1	OFF	64.3	56.2	56.8	58.1	61.5	60.2	64.3	64.6	63.6	66.1
12/28/02	65.9	63.2	64.2	59.9	62.5	57.3	58.7	OFF	63.7	51.5	53.6	56.4	60.9	59.7	63.1	64.3	62.5	65.4
12/29/02	60.7	60.1	62.4	60.9	62.5	65.9	63.9	OFF	62.2	53.5	50.6	55.3	56.8	58.3	60.5	65.3	60.4	64.7
12/30/02	66.2	64.2	66.6	60.2	64.8	59.1	63.5	OFF	64.1	57.8	55.8	59.2	63.7	61.6	65.3	65.9	65.0	65.4
12/31/02	62.7	61.0	63.4	59.3	63.6	62.6	63.7	OFF	61.7	60.7	58.2	55.3	59.6	59.6	61.5	64.4	61.0	63.3
AVERAGE	66.1	63.4	64.8	62.7	64.8	63.0	62.9	0.0	63.0	58.3	56.7	57.9	62.0	60.5	63.8	65.4	63.3	65.1
NO./DAYS	29	29	29	29	29	29	29	0	29	29	27	29	28	29	29	29	28	29
QTR. AVG	65.6	63.4	65.0	62.9	64.3	61.6	61.6	0.0	63.2	58.1	56.5	56.9	61.8	60.4	63.6	65.1	63.4	64.7
NO./DAYS	87	87	87	85	87	87	87	0	84	86	84	87	80	87	87	87	85	87

TABLE 4. AVERAGE CNEL VALUES

Site No.	1st Quarter 2002	2nd Quarter 2002	3rd Quarter 2002	4th Quarter 2002	4-Quarter Average
1	64.8	65.8	65.4	65.6	65.4
2	62.4	62.8	62.6	63.4	62.8
3	63.5	64.1	64.5	65.0	64.3
4	63.2	62.3	62.6	62.9	62.8
5	64.1	63.3	62.0	64.3	63.5
6	64.0	62.7	60.9	61.6	62.5
7	63.8	63.4	62.5	61.6	62.9
8	0.0	0.0	0.0	0.0	0.0
9	62.4	64.4	63.8	63.2	63.5
10	59.5	61.0	57.9	58.1	59.3
11	58.0	57.1	55.2	56.5	56.8
12	57.4	55.9	54.6	56.9	56.3
13	61.4	62.4	61.5	61.8	61.8
14	59.3	59.7	59.6	60.4	59.8
15	62.8	63.6	63.3	63.6	63.3
16	63.5	64.0	64.2	65.1	64.2
17	62.3	63.6	63.2	63.4	63.2
18	64.2	64.6	64.3	64.7	64.5

TABLE 5. WEEKLY SCHEDULED AIR CARRIER AND COMMUTER FLIGHTS FOR THE FOURTH QUARTER 2002

SCHEDULE IN EFFECT FROM 10/01/02 - 10/03/02

	AA DEPA MD80	AA ARRI MD80	AS DEPA MD80	AS ARRI MD80	AS DEPA B7377	AS ARRI B7377	WN DEPA B7373	WN ARRI B7373
DAY	21	21	21	14	13	13	143	145
EVENING	0	6	7	14	0	0	58	56
NIGHT	6	0	0	0	0	0	0	0
TOTAL	27	27	28	28	13	13	201	201

SCHEDULE IN EFFECT FROM 10/01/02 - 10/03/02

	WN DEPA B7375	WN ARRI B7375	WN DEPA B7377	WN ARRI B7377	UA DEPA B7373	UA ARRI B7373	UA DEPA B7375	UA ARRI B7375
DAY	69	73	41	42	17	16	31	25
EVENING	17	13	16	15	1	7	5	13
NIGHT	0	0	0	0	5	0	2	0
TOTAL	86	86	57	57	23	23	38	38

SCHEDULE IN EFFECT FROM 10/01/02 - 10/03/02

	HP DEPA A320	HP ARRI A320	HP DEPA A319	HP ARRI A319	AS DEPA B7374	AS ARRI B7374	AQ DEPA B7377	AQ ARRI B7377
DAY	6	6	20	20	8	8	7	7
EVENING	0	7	0	0	0	0	7	7
NIGHT	7	0	0	0	0	0	0	0
TOTAL	13	13	20	20	8	8	14	14

SCHEDULE IN EFFECT FROM 10/01/02 - 10/03/02

	UPS DEPA B757	UPS ARRI B757	FE DEPA B727Q	FE ARRI B727Q	FE DEPA A300	FE ARRI A300	FE DEPA A310	FE ARRI A310
DAY	0	5	0	0	0	1	0	0
EVENING	5	0	0	0	5	0	0	0
NIGHT	0	0	0	0	0	4	4	4
TOTAL	5	5	0	0	5	5	4	4

SCHEDULE IN EFFECT FROM 10/01/02 - 10/03/02

	HP DEPA CRJ	HP ARRI CRJ	TOTAL DEPA	TOTAL ARRI
DAY	6	6	403	402
EVENING	0	0	121	138
NIGHT	0	0	24	8
TOTAL	6	6	548	548

TABLE 5. (CONTINUED)

SCHEDULE IN EFFECT FROM 10/04/02 - 10/26/02

	AA DEPA MD80	AA ARRI MD80	AS DEPA MD80	AS ARRI MD80	AS DEPA B7377	AS ARRI B7377	WN DEPA B7373	WN ARRI B7373
DAY	21	21	21	14	13	13	143	145
EVENING	0	6	7	14	0	0	58	56
NIGHT	6	0	0	0	0	0	0	0
TOTAL	27	27	28	28	13	13	201	201

SCHEDULE IN EFFECT FROM 10/04/02 - 10/26/02

	WN DEPA B7375	WN ARRI B7375	WN DEPA B7377	WN ARRI B7377	UA DEPA B7373	UA ARRI B7373	UA DEPA B7375	UA ARRI B7375
DAY	69	73	41	42	18	18	31	25
EVENING	17	13	16	15	1	6	5	12
NIGHT	0	0	0	0	5	0	1	0
TOTAL	86	86	57	57	24	24	37	37

SCHEDULE IN EFFECT FROM 10/04/02 - 10/26/02

	HP DEPA A320	HP ARRI A320	HP DEPA A319	HP ARRI A319	AS DEPA B7374	AS ARRI B7374	AQ DEPA B7377	AQ ARRI B7377
DAY	6	6	20	20	8	8	7	7
EVENING	0	7	0	0	0	0	7	7
NIGHT	7	0	0	0	0	0	0	0
TOTAL	13	13	20	20	8	8	14	14

SCHEDULE IN EFFECT FROM 10/04/02 - 10/26/02

	UPS DEPA B757	UPS ARRI B757	FE DEPA B727Q	FE ARRI B727Q	FE DEPA A300	FE ARRI A300	FE DEPA A310	FE ARRI A310
DAY	0	5	0	0	0	1	0	0
EVENING	5	0	0	0	5	0	0	0
NIGHT	0	0	0	0	0	4	4	4
TOTAL	5	5	0	0	5	5	4	4

SCHEDULE IN EFFECT FROM 10/04/02 - 10/26/02

	HP DEPA CRJ	HP ARRI CRJ	TOTAL DEPA	TOTAL ARRI
DAY	6	6	404	404
EVENING	0	0	121	136
NIGHT	0	0	23	8
TOTAL	6	6	548	548

TABLE 5. (CONTINUED)

SCHEDULE IN EFFECT FROM 10/27/02 - 10/27/02

	AA DEPA MD80	AA ARRI MD80	AS DEPA MD80	AS ARRI MD80	AS DEPA B7377	AS ARRI B7377	WN DEPA B7373	WN ARRI B7373
DAY	21	21	27	20	7	7	139	131
EVENING	0	6	0	7	0	0	60	67
NIGHT	6	0	0	0	0	0	0	1
TOTAL	27	27	27	27	7	7	199	199

SCHEDULE IN EFFECT FROM 10/27/02 - 10/27/02

	WN DEPA B7375	WN ARRI B7375	WN DEPA B7377	WN ARRI B7377	UA DEPA B7373	UA ARRI B7373	UA DEPA B7375	UA ARRI B7375
DAY	76	76	49	42	18	18	31	25
EVENING	7	2	11	18	1	6	5	12
NIGHT	0	5	0	0	5	0	1	0
TOTAL	83	83	60	60	24	24	37	37

SCHEDULE IN EFFECT FROM 10/27/02 - 10/27/02

	HP DEPA A320	HP ARRI A320	HP DEPA A319	HP ARRI A319	AS DEPA B7374	AS ARRI B7374	AQ DEPA B7377	AQ ARRI B7377
DAY	6	6	20	20	6	6	7	7
EVENING	0	7	0	0	7	7	7	7
NIGHT	7	0	0	0	0	0	0	0
TOTAL	13	13	20	20	13	13	14	14

SCHEDULE IN EFFECT FROM 10/27/02 - 10/27/02

	UPS DEPA B757	UPS ARRI B757	FE DEPA B727Q	FE ARRI B727Q	FE DEPA A300	FE ARRI A300	FE DEPA A310	FE ARRI A310
DAY	0	5	0	0	0	1	0	0
EVENING	5	0	0	0	5	0	0	0
NIGHT	0	0	0	0	0	4	4	4
TOTAL	5	5	0	0	5	5	4	4

SCHEDULE IN EFFECT FROM 10/27/02 - 10/27/02

	HP DEPA CRJ	HP ARRI CRJ	TOTAL DEPA	TOTAL ARRI
DAY	6	6	413	391
EVENING	0	0	108	139
NIGHT	0	0	23	14
TOTAL	6	6	544	544

TABLE 5. (CONTINUED)

SCHEDULE IN EFFECT FROM 10/28/02 - 12/01/02

	AA DEPA MD80	AA ARRI MD80	AS DEPA MD80	AS ARRI MD80	AS DEPA B7377	AS ARRI B7377	WN DEPA B7373	WN ARRI B7373
DAY	21	21	27	20	7	7	139	131
EVENING	0	6	0	7	0	0	60	67
NIGHT	6	0	0	0	0	0	0	1
TOTAL	27	27	27	27	7	7	199	199

SCHEDULE IN EFFECT FROM 10/28/02 - 12/01/02

	WN DEPA B7375	WN ARRI B7375	WN DEPA B7377	WN ARRI B7377	UA DEPA B7373	UA ARRI B7373	UA DEPA B7375	UA ARRI B7375
DAY	76	76	49	42	18	18	31	25
EVENING	7	2	11	18	1	6	5	12
NIGHT	0	5	0	0	5	0	1	0
TOTAL	83	83	60	60	24	24	37	37

SCHEDULE IN EFFECT FROM 10/28/02 - 12/01/02

	HP DEPA A320	HP ARRI A320	HP DEPA A319	HP ARRI A319	AS DEPA B7374	AS ARRI B7374	AQ DEPA B7377	AQ ARRI B7377
DAY	6	6	20	20	6	6	7	7
EVENING	0	7	0	0	7	7	7	7
NIGHT	7	0	0	0	0	0	0	0
TOTAL	13	13	20	20	13	13	14	14

SCHEDULE IN EFFECT FROM 10/28/02 - 12/01/02

	UPS DEPA B757	UPS ARRI B757	FE DEPA B727Q	FE ARRI B727Q	FE DEPA A300	FE ARRI A300	FE DEPA A310	FE ARRI A310
DAY	0	5	0	0	4	4	0	0
EVENING	5	0	0	0	4	4	0	0
NIGHT	0	0	0	0	0	0	4	4
TOTAL	5	5	0	0	8	8	4	4

SCHEDULE IN EFFECT FROM 10/28/02 - 12/01/02

	HP DEPA CRJ	HP ARRI CRJ	TOTAL DEPA	TOTAL ARRI
DAY	6	6	417	394
EVENING	0	0	107	143
NIGHT	0	0	23	10
TOTAL	6	6	547	547

TABLE 5. (CONTINUED)

SCHEDULE IN EFFECT FROM 12/02/02 - 12/12/02

	AA DEPA MD80	AA ARRI MD80	AS DEPA MD80	AS ARRI MD80	AS DEPA B7377	AS ARRI B7377	WN DEPA B7373	WN ARRI B7373
DAY	21	21	27	20	7	7	139	131
EVENING	0	6	0	7	0	0	60	67
NIGHT	6	0	0	0	0	0	0	1
TOTAL	27	27	27	27	7	7	199	199

SCHEDULE IN EFFECT FROM 12/02/02 - 12/12/02

	WN DEPA B7375	WN ARRI B7375	WN DEPA B7377	WN ARRI B7377	UA DEPA B7373	UA ARRI B7373	UA DEPA B7375	UA ARRI B7375
DAY	76	76	49	42	18	18	31	25
EVENING	7	2	11	18	1	6	5	12
NIGHT	0	5	0	0	5	0	1	0
TOTAL	83	83	60	60	24	24	37	37

SCHEDULE IN EFFECT FROM 12/02/02 - 12/12/02

	HP DEPA A320	HP ARRI A320	HP DEPA A319	HP ARRI A319	AS DEPA B7374	AS ARRI B7374	AQ DEPA B7377	AQ ARRI B7377
DAY	6	6	20	20	6	6	7	7
EVENING	0	7	0	0	7	7	7	7
NIGHT	7	0	0	0	0	0	0	0
TOTAL	13	13	20	20	13	13	14	14

SCHEDULE IN EFFECT FROM 12/02/02 - 12/12/02

	UPS DEPA B757	UPS ARRI B757	FE DEPA B727Q	FE ARRI B727Q	FE DEPA A300	FE ARRI A300	FE DEPA A310	FE ARRI A310
DAY	0	5	0	2	0	5	0	0
EVENING	5	0	2	0	5	0	0	0
NIGHT	0	0	0	0	0	0	6	6
TOTAL	5	5	2	2	5	5	6	6

SCHEDULE IN EFFECT FROM 12/02/02 - 12/12/02

	HP DEPA CRJ	HP ARRI CRJ	TOTAL DEPA	TOTAL ARRI
DAY	6	6	413	397
EVENING	0	0	110	139
NIGHT	0	0	25	12
TOTAL	6	6	548	548

TABLE 5. (CONTINUED)

SCHEDULE IN EFFECT FROM 12/13/02 - 12/14/02

	AA DEPA MD80	AA ARRI MD80	AS DEPA MD80	AS ARRI MD80	AS DEPA B7377	AS ARRI B7377	WN DEPA B7373	WN ARRI B7373
DAY	21	21	27	20	7	7	139	131
EVENING	0	6	0	7	0	0	60	67
NIGHT	6	0	0	0	0	0	0	1
TOTAL	27	27	27	27	7	7	199	199

SCHEDULE IN EFFECT FROM 12/13/02 - 12/14/02

	WN DEPA B7375	WN ARRI B7375	WN DEPA B7377	WN ARRI B7377	UA DEPA B7373	UA ARRI B7373	UA DEPA B7375	UA ARRI B7375
DAY	76	76	49	42	0	0	42	42
EVENING	7	2	11	18	0	0	7	13
NIGHT	0	5	0	0	0	0	6	0
TOTAL	83	83	60	60	0	0	55	55

SCHEDULE IN EFFECT FROM 12/13/02 - 12/14/02

	HP DEPA A320	HP ARRI A320	HP DEPA A319	HP ARRI A319	AS DEPA B7374	AS ARRI B7374	AQ DEPA B7377	AQ ARRI B7377
DAY	6	6	20	20	6	6	7	7
EVENING	0	7	0	0	7	7	7	7
NIGHT	7	0	0	0	0	0	0	0
TOTAL	13	13	20	20	13	13	14	14

SCHEDULE IN EFFECT FROM 12/13/02 - 12/14/02

	UPS DEPA B757	UPS ARRI B757	FE DEPA B727Q	FE ARRI B727Q	FE DEPA A300	FE ARRI A300	FE DEPA A310	FE ARRI A310
DAY	0	5	0	2	0	5	0	0
EVENING	5	0	2	0	5	0	0	0
NIGHT	0	0	0	0	0	0	6	6
TOTAL	5	5	2	2	5	5	6	6

SCHEDULE IN EFFECT FROM 12/13/02 - 12/14/02

	HP DEPA CRJ	HP ARRI CRJ	UA DEPA A319	UA ARRI A319	TOTAL DEPA	TOTAL ARRI
DAY	6	6	7	0	413	396
EVENING	0	0	0	7	111	141
NIGHT	0	0	0	0	25	12
TOTAL	6	6	7	7	549	549

TABLE 5. (CONTINUED)

SCHEDULE IN EFFECT FROM 12/15/02 - 12/29/02

	AA DEPA MD80	AA ARRI MD80	AS DEPA MD80	AS ARRI MD80	AS DEPA B7377	AS ARRI B7377	WN DEPA B7373	WN ARRI B7373
DAY	14	7	27	20	7	7	139	131
EVENING	0	13	0	7	0	0	60	67
NIGHT	6	0	0	0	0	0	0	1
TOTAL	20	20	27	27	7	7	199	199

SCHEDULE IN EFFECT FROM 12/15/02 - 12/29/02

	WN DEPA B7375	WN ARRI B7375	WN DEPA B7377	WN ARRI B7377	UA DEPA B7373	UA ARRI B7373	UA DEPA B7375	UA ARRI B7375
DAY	76	76	49	42	0	0	42	42
EVENING	7	2	11	18	0	0	7	13
NIGHT	0	5	0	0	0	0	6	0
TOTAL	83	83	60	60	0	0	55	55

SCHEDULE IN EFFECT FROM 12/15/02 - 12/29/02

	HP DEPA A320	HP ARRI A320	HP DEPA A319	HP ARRI A319	AS DEPA B7374	AS ARRI B7374	AQ DEPA B7377	AQ ARRI B7377
DAY	6	6	20	20	6	6	7	7
EVENING	0	7	0	0	7	7	7	7
NIGHT	7	0	0	0	0	0	0	0
TOTAL	13	13	20	20	13	13	14	14

SCHEDULE IN EFFECT FROM 12/15/02 - 12/29/02

	UPS DEPA B757	UPS ARRI B757	FE DEPA B727Q	FE ARRI B727Q	FE DEPA A300	FE ARRI A300	FE DEPA A310	FE ARRI A310
DAY	0	5	0	2	0	5	0	0
EVENING	5	0	2	0	5	0	0	0
NIGHT	0	0	0	0	0	0	6	6
TOTAL	5	5	2	2	5	5	6	6

SCHEDULE IN EFFECT FROM 12/15/02 - 12/29/02

	HP DEPA CRJ	HP ARRI CRJ	UA DEPA A319	UA ARRI A319	TOTAL DEPA	TOTAL ARRI
DAY	6	6	7	0	406	382
EVENING	0	0	0	7	111	148
NIGHT	0	0	0	0	25	12
TOTAL	6	6	7	7	542	542

TABLE 5. (CONTINUED)

SCHEDULE IN EFFECT FROM 12/30/02 - 12/31/02

	AA DEPA MD80	AA ARRI MD80	AS DEPA MD80	AS ARRI MD80	AS DEPA B7377	AS ARRI B7377	WN DEPA B7373	WN ARRI B7373
DAY	14	7	27	20	7	7	139	131
EVENING	0	13	0	7	0	0	60	67
NIGHT	6	0	0	0	0	0	0	1
TOTAL	20	20	27	27	7	7	199	199

SCHEDULE IN EFFECT FROM 12/30/02 - 12/31/02

	WN DEPA B7375	WN ARRI B7375	WN DEPA B7377	WN ARRI B7377	UA DEPA B7373	UA ARRI B7373	UA DEPA B7375	UA ARRI B7375
DAY	76	76	49	42	0	0	42	42
EVENING	7	2	11	18	0	0	7	13
NIGHT	0	5	0	0	0	0	6	0
TOTAL	83	83	60	60	0	0	55	55

SCHEDULE IN EFFECT FROM 12/30/02 - 12/31/02

	HP DEPA A320	HP ARRI A320	HP DEPA A319	HP ARRI A319	AS DEPA B7374	AS ARRI B7374	AQ DEPA B7377	AQ ARRI B7377
DAY	6	6	20	20	6	6	7	7
EVENING	0	7	0	0	7	7	7	7
NIGHT	7	0	0	0	0	0	0	0
TOTAL	13	13	20	20	13	13	14	14

SCHEDULE IN EFFECT FROM 12/30/02 - 12/31/02

	UPS DEPA B757	UPS ARRI B757	FE DEPA B727Q	FE ARRI B727Q	FE DEPA A300	FE ARRI A300	FE DEPA A310	FE ARRI A310
DAY	0	5	0	0	0	5	0	0
EVENING	5	0	0	0	5	0	0	0
NIGHT	0	0	0	0	0	0	4	4
TOTAL	5	5	0	0	5	5	4	4

SCHEDULE IN EFFECT FROM 12/30/02 - 12/31/02

	HP DEPA CRJ	HP ARRI CRJ	UA DEPA A319	UA ARRI A319	TOTAL DEPA	TOTAL ARRI
DAY	6	6	7	0	406	380
EVENING	0	0	0	7	109	148
NIGHT	0	0	0	0	23	10
TOTAL	6	6	7	7	538	538

TABLE 5. (CONTINUED)

FOURTH QUARTER 2002

PERIOD TOTALS FOR
AIR CARRIERS AND COMMUTERS

AIR CARRIERS

	DEP	ARR
DAY	5397	5190
EVE	1473	1859
NIGHT	311	132
TOTAL	7181	7181

COMMUTERS

	DEP	ARR
DAY	0	0
EVE	0	0
NIGHT	0	0
TOTAL	0	0

AIR CARRIERS AND COMMUTERS

	DEP	ARR
DAY	5397	5190
EVE	1473	1859
NIGHT	311	132
TOTAL	7181	7181

VI. INCOMPATIBLE LAND USE

The contours shown in Figures 1 and 2 were digitized and overlaid on a digital land use map of the area around the Airport. The total areas enclosed by the 65 and 70 dB CNEL contours were 1,129.4 and 466.6 acres, respectively. The areas of incompatible land uses enclosed by the contours were then computed[2]. The incompatible land use areas were 214.42 acres within the 65 dB contour and 7.06 acres within the 70 dB contour.

It should be noted that the above incompatible land areas do not include the soundproofed schools in the vicinity of the Airport (the Luther Burbank Middle School, St. Patrick and Glenwood Schools). The above incompatible land use areas also do not include those residences to which the Airport has acquired avigation easements. Within the 65 dB contour, the Airport has acquired avigation easements, through its ongoing sound insulation program, to 385 parcels of land. Those 385 parcels total 56.61 acres. Forty four of the 385 parcels, totaling 6.70 acres, are also located within the 70 dB contour. Within the 65 dB contour, the Airport has also acquired avigation easements, under the Court of Appeal decision in Baker vs. Burbank-Glendale-Pasadena Airport Authority, 220 Cal.App.3d 1602 (1990), to an additional 45 parcels of land. Those parcels total 6.60 acres. Five of those 45 parcels, totaling 0.70 acres, are located within the 70dB contour.

The estimated numbers of residences are 965 within the 65 dB contour, and 32 within the 70 dB contour. The estimated numbers of people residing within the 65 and 70 dB CNEL contours are 2,605 and 86 respectively.

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[2] AAAI maintains a digitized map of the existing land use around the Airport. This data base has been employed on a consistent basis in determining the land use and contour areas reported in the quarterly noise reports.

REFERENCES

1. California Department of Transportation, Division of Aeronautics, "Noise Standards", California Code of Regulations, Title 21, Chapter 2.5, Subchapter 6.

2. L-30488, Department of Transportation, State of California, 27 June 1984.

3. "Quarterly Noise Monitoring at Burbank Airport, First Quarter 2002", AAAI Report 1265.

4. "Quarterly Noise Monitoring at Burbank Airport, Second Quarter 2002", AAAI Report 1266.

5. "Quarterly Noise Monitoring at Burbank Airport, Third Quarter 2002, AAAI Report 1267.

APPENDIX A
NOISE MONITOR INSTRUMENTATION

APPENDIX A
NOISE MONITOR INSTRUMENTATION

The permanent noise monitor system, manufactured by Tracor, consists of 17 remote monitoring stations (RMS) connected to a central site by telephone lines. The system block diagram showing the major elements is shown in Figure A-1. The electrical signal generated by the microphone/preamplifier assembly at each site is processed in the RMS electronics. The signal is passed through an A-weighting filter and is then detected and converted to a digital level signal in decibels with a resolution of 0.1 dB.

The digitized sound level is transmitted every half second by telephone line to the central site. The data received by the central site are processed by the computer. According to preset parameters, the noise is separated into two categories--aircraft noise and community noise. Each event attributed to an aircraft is saved in a noise event file. Computations are made of hourly noise level, community noise equivalent level, runway use, and other parameters. A wide variety of data presentations is available by exercising a number of routines provided by Tracor, as well as special-purpose routines that can be generated by the user.

The locations of the remote sites (shown in Figure 3) are listed relative to the runway thresholds in Table A-1.

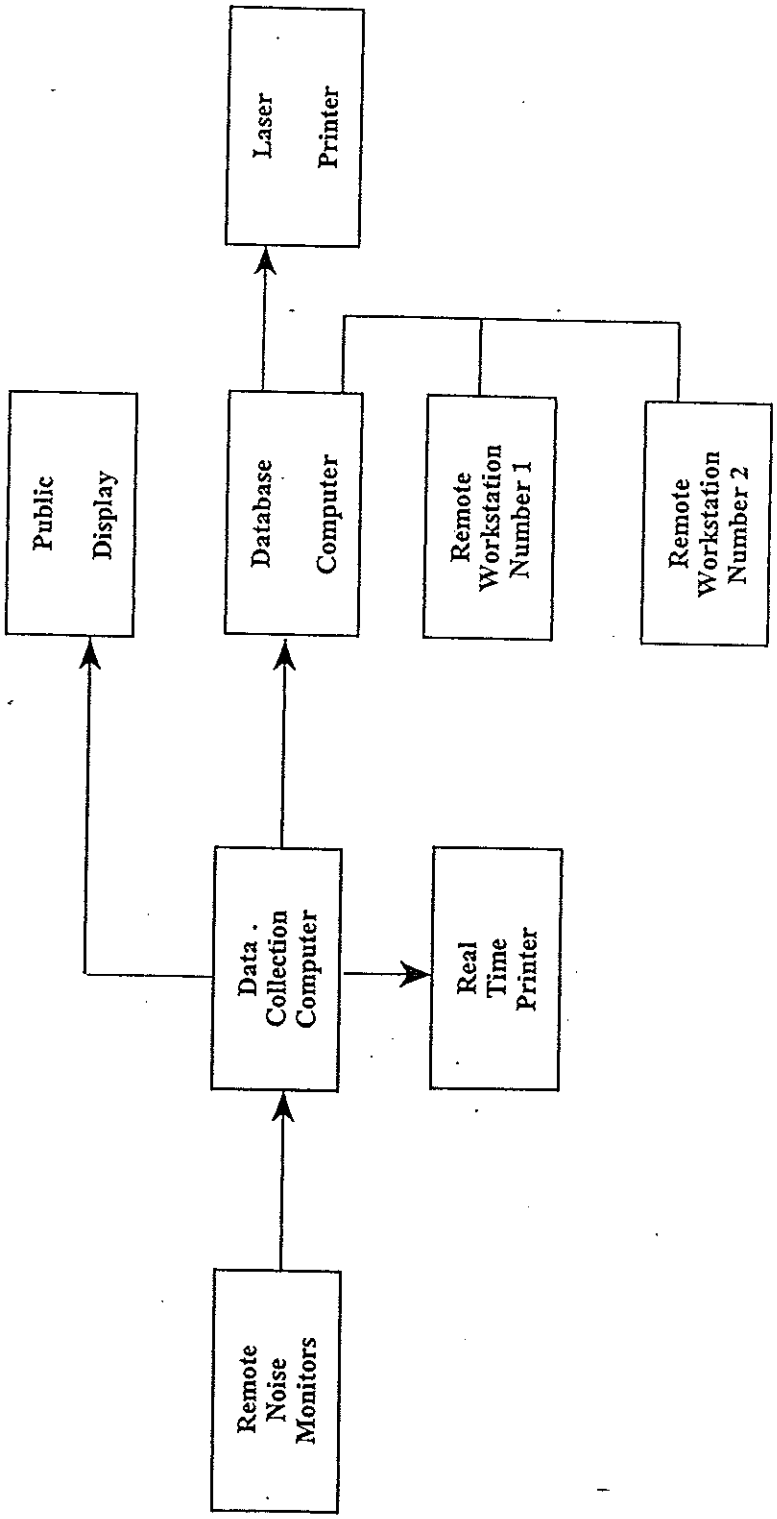

FIGURE A-1. PERMANENT NOISE MONITOR SYSTEM BLOCK DIAGRAM

TABLE A-1
NOISE MONITOR SITE LOCATIONS

Site No.	Distance From N. End of RW 15	Distance From Extended Centerline
1	8590	-1490
2	10830	1590
3	13440	-1090
4	-150	1200
5	-810	1100
6	-3280	-740
7	-4720	-50
12	7520	-3320
13	10660	-3600
14	12780	1160
15	13380	-3920
16	11600	360
17	12900	-3520

Note: Positive distances from the runway threshold are to the south; positive distances from the extended centerline are to the east.

Site No.	Distance From W. End of RW 8	Distance From Extended Centerline
8	-5900	-820
9	-8700	220
10	8180	-880
11	8740	-110
18	-5880	-440

Note: Positive distances from the runway threshold are to the east; positive distances from the extended centerline are to the north.

APPENDIX B
CALIBRATION

APPENDIX B
CALIBRATION

The system was calibrated during setup using a Bruel and Kjaer pistonphone. Acoustic calibrations are being performed approximately every six months. Electrical calibrations are performed automatically shortly after midnight each day. Figure B-1 shows the latest calibration certificate of the pistonphone employed in the acoustic calibrations and Figure B-2 shows a typical electrical calibration.

CERTIFICATE OF CALIBRATION
For Brüel & Kjær Pistonphone
Type 4228

The calibration is performed by comparison with Calibration Service Standard Pistonphones:

Type 4220 serial No. 1476021 and
Type 4220 serial No. 1510240

Calibrated by: TS (BRÜEL & KJÆR) Date: 13 AUG 2001
Re-calibration due 13 AUG 2002

a) Estimated uncertainty of comparison:
   ± 0.04 dB at 99% confidence level.
b) Estimated uncertainty of Calibration Service Standard Pistonphone:
   ± 0.09 dB at 99% confidence level.
c) Absolute uncertainty:
   Sq. Root (a^2+b^2) = 0.10 dB at 99% confidence level.

Serial No. 2245246 Id No. N/A

Sound Pressure Level produced in the coupler terminated by a loading volume of 1,333 cm^3 at 1013 mbar, 20°C, 65% R.H. 124.05 dB re $20_u Pa$

This calibration is traceable to:
NIST Test No. 822/263410-00, D1149.

Frequency: 251.16 Hz in "On" position

Distortion: Less than 3%

If the Ambient Pressure P_a deviates from the above stated nominal value 1013 mbar a correction Δ SPL should be added to the calibrated Sound Pressure Level.

$\Delta SPL = 20 \times \log_{10}$ Pa (hPa)/1013

Condition of Test:

Ambient Pressure	991.96	hPa
Temperature	23°	C
Relative Humidity	37	%
Date of Calibration	17 APR 2002	
Re-calibration due on	17 APR 2003	

Calibration procedure: Brüel & Kjær 4220, Rev 13 AUG 2001

Certificate # 10544-2
PO# Verbal
For : Burbank Airport
Burbank, CA 91505

PERFORMANCE AS RECEIVED:

Frequency	251.16	Hz
SPL	124.05	dB
Distortion	0.5	%
HF Noise	-54	dB re 124 dB
Batt. Voltage	8.9	VOLT

Was repair or adjustment performed? No!
Were parts replaced? No!
Were batteries replaced? Yes!

Calibration performed by:

Harold Lynch, Service Manager

ODIN METROLOGY, INC.
CALIBRATION OF BRÜEL & KJÆR INSTRUMENTS
3533 OLD CONEJO ROAD, SUITE 125
THOUSAND OAKS, CA 91320
PHONE: (805) 375-0830; FAX: (805) 375-0405

FINAL PERFORMANCE:

Frequency	251.16	Hz
SPL	124.05	dB
Distortion	0.5	%
HF Noise:	-54	dB re 124 dB

Note: This pistonphone was within MFG. specifications as received.

```
*************************
*  Calibration Report  *
*************************
```

```
Calibration  RMS: 1  Passed Peak:109.8 dB @ 01/13/2002  0:06
Calibration  RMS: 2  Passed Peak:110.0 dB @ 01/13/2002  0:06
Calibration  RMS: 3  Passed Peak:109.8 dB @ 01/13/2002  0:06
Calibration  RMS: 4  Passed Peak:109.7 dB @ 01/13/2002  0:06
Calibration  RMS: 5  Passed Peak:109.9 dB @ 01/13/2002  0:06
Calibration  RMS: 6  Passed Peak:110.0 dB @ 01/13/2002  0:06
Calibration  RMS: 7  Passed Peak:109.9 dB @ 01/13/2002  0:06
Calibration  RMS: 9  Passed Peak:109.6 dB @ 01/13/2002  0:06
Calibration  RMS:10 Passed Peak:110.0 dB @ 01/13/2002  0:06
Calibration  RMS:11 Passed Peak:110.0 dB @ 01/13/2002  0:06
Calibration  RMS:12 Passed Peak:110.1 dB @ 01/13/2002  0:06
Calibration  RMS:13 Passed Peak:110.1 dB @ 01/13/2002  0:06
Calibration  RMS:14 Passed Peak:110.0 dB @ 01/13/2002  0:06
Calibration  RMS:15 Passed Peak:110.0 dB @ 01/13/2002  0:06
Calibration  RMS:16 Passed Peak:110.1 dB @ 01/13/2002  0:06
Calibration  RMS:17 Passed Peak:109.7 dB @ 01/13/2002  0:06
Calibration  RMS:18 Passed Peak:109.8 dB @ 01/13/2002  0:06
```

Figure B-2. Typical Daily Electrical Calibration